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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/674,101	10/26/2000	Mikko Kanerva	875.0005USU	1599

29683 7590 05/21/2003

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EXAMINER

ELAHEE, MD S

ART UNIT	PAPER NUMBER
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2697

DATE MAILED: 05/21/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/674,101

Applicant(s)

KANERVA ET AL.

Examiner

Md S Elahee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 03. 6) ☐ Other: ____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. Claims 1, 12, 15 and 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 12, 15 and 17 are not clear because of using the phrase “optionally” for indicating the caller’s identity in the call establishment signaling since, this is an essential feature for comparing the caller identity with the group of allowed identities.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-5 and 7-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alperovich et al. (International Pub. No. WO 98/05153) and in view of Kocan et al. (U.S. Patent No. 5,615,253).

Regarding claim 1, Alperovich teaches storing in the system subscriber information including service definitions of a subscriber (fig.2, element 210; page 7, lines 19-26).

Alperovich further teaches establishing connections to the subscriber via a network element having access to the subscriber information of the subscriber (fig.2, element 160; page 6, lines 24-34).

Alperovich further teaches allowing a subscriber to define in his subscriber information that his incoming calls are to be forwarded to another subscriber (page 7, lines 19-21).

Alperovich further teaches redirection counter and a calling-party directory number (page 5, lines 31-35; 'redirection counter' reads on the claim 'indicating the forwarding of a call' and 'calling-party directory number' reads on the claim 'optionally a caller's identity in a call establishment signaling').

Alperovich further teaches storing a group of caller identities in the subscriber information for defining a group of allowed caller identities, said allowed caller identities being either those included in or excluded from the group (fig.2; page 7, lines 19-26).

Alperovich fails to teach "determining whether the caller identity of an incoming forwarded call belongs to the allowed identities by comparing the caller identity with said group of caller identities, in response to receiving the call establishment signaling in the network element". Kocan teaches determining whether the caller identity of an incoming forwarded call belongs to the allowed identities by comparing the caller identity with said group of caller identities, in response to receiving the call establishment signaling in the network element (abstract; col.7, lines 9-19). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Alperovich to allow determining whether the caller identity of an incoming forwarded call belongs to the allowed identities as taught by Kocan. The motivation for the modification is to have the determination to make the call blocking based on the caller's identity.

Alperovich further fails to teach "continuing to establish the incoming forwarded call if the caller identity belongs to the allowed identities". Kocan teaches continuing to establish the

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incoming forwarded call if the caller identity belongs to the allowed identities (abstract; col.7, lines 9-19). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Alperovich to allow continuing to establish the incoming forwarded call for the allowed identities as taught by Kocan. The motivation for the modification is to have the determination to accept the call forwarding based on the caller's identity.

Alperovich fails to teach "rejecting the incoming forwarded call if the caller identity does not belong to the allowed identities". Kocan teaches terminating the incoming forwarded call if the caller identity does not belong to the allowed identities (abstract; col.7, lines 9-19; 'terminating' reads on the claim 'rejecting'). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Alperovich to allow rejecting the incoming forwarded call as taught by Kocan. The motivation for the modification is to have the rejection in order to minimize the fraud call forwarding.

Regarding claim 2, Alperovich teaches that the subscriber defines the group of caller identities (page 7, lines 19-33).

Regarding claim 3, Alperovich teaches using a redirection counter in the call establishment signaling, in response to receiving call establishment signaling requesting establishment of a call from a calling subscriber to a first subscriber and determining that the first subscriber has forwarded the first subscriber's calls to a second subscriber, the call is forwarded to the second subscriber, and the value of the call forwarding counter is incremented (page 5, lines 31-35; page 7, lines 19-33; 'redirection counter' reads on the claim 'call forwarding counter').

Alperovich further teaches determining whether the call has been forwarded, the value of the redirection counter indicated in the call establishment signaling is compared to predefined value, and if the value of the call forwarding counter exceeds the predefined value, the call is determined to be a forwarded one (page 7, lines 19-33; 'redirection counter' reads on the claim 'call forwarding counter').

Regarding claim 4, Alperovich teaches that callers, whose calls are to be rejected, are defined by the group of caller identities (abstract; page 11, lines 7-15).

Regarding claim 5, Alperovich fails to teach "the group of caller identities by callers whose calls are to be accepted, and rejecting calls whose caller identity does not belong to said group". Kocan teaches that the group of caller identities by callers whose calls are to be allowed, and terminating calls whose caller identity does not belong to the group (abstract; col.7, lines 9-19; 'allowed' reads on the claim 'accepted' and 'terminating' reads on the claim 'rejecting'). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Alperovich to allow accepting and rejecting the incoming forwarded call as taught by Kocan. The motivation for the modification is to have the acception and rejection in order to minimize the fraud call forwarding.

Regarding claim 7, Alperovich teaches that an intelligent network capable of storing subscriber information, characterized in that in the network element, the event of receiving a forwarded incoming call to a subscriber having determined the subscriber's forwarded incoming calls to be rejected is defined to be a trigger for sending a query to the intelligent network, and in response to having received the request to establish a call to a subscriber and having determined that the call has been forwarded and the subscriber has determined the forwarded incoming calls

to be rejected, a query having the calling party's number as a parameter is sent to the intelligent network (fig.5, fig. 5a; page 10, lines 5-30).

Alperovich further fails to teach "in the intelligent network, a set of allowed calling numbers in the subscriber information is stored and in response to having received the query sent by the network element, the set of allowed calling numbers is retrieved from the subscriber information, the calling party number is compared to the set, and the network element is instructed to continue a call establishment procedure if the calling party number belongs to the set of allowed calling numbers and to reject the incoming call if the calling number does not belong to the set". Kocan teaches that in the signaling network, a set of allowed calling numbers in the subscriber information is stored and in response to having received the query sent by the network element, the set of allowed calling numbers is retrieved from the subscriber information, the calling party number is compared to the set, and the network element is instructed to continue a call establishment procedure if the calling party number belongs to the set of allowed calling numbers and to terminate the incoming call if the calling number does not belong to the set (abstract; fig.3; col.6, lines 21-59, 63-67, col.7, lines 1-19; 'signaling network' reads on the claim 'intelligent network' and 'terminate' reads on the claim 'reject'). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Alperovich to allow and reject the incoming forwarded call as taught by Kocan. The motivation for the modification is to have the allowance and rejection in order to minimize the fraud call forwarding.

Regarding claim 8, Alperovich further teaches that a fixed network comprising a local exchange the subscriber is connected to, characterized in that the network element is a local

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exchange and the subscriber information is stored in a database the local exchange is connected to (fig.3; page 6, lines 3-16).

Regarding claim 9, Alperovich teaches that a mobile services switching center (MSC) serving the subscriber, and a visitor location register (VLR) connected to the mobile services switching center (MSC) (fig.2, element 210).

Alperovich teaches that the subscriber information is stored in the visitor location register (VLR) and the network element is the mobile services switching center (MSC) (fig.2; page 7, lines 21-29).

Regarding claim 10, Alperovich teaches a home location register (HLR(C); HLR-C; MHLR) storing the subscriber information of a subscriber (fig.2; page 6, lines 33-36).

Alperovich further teaches that a gateway mobile services switching center (GMSC-C) via which an incoming calls of the subscriber are routed (fig.2; page 6, lines 33-37, page 7, lines 1, 2).

Alperovich further teaches that the subscriber information is stored in the home location register (HLR) and the network element is the gateway mobile services switching center (GMSC-C) (fig.2; page 6, lines 33-36).

Regarding claim 11, Alperovich teaches determining whether a call has been forwarded, the presence of a forwarding number indicating the identity of the party having forwarded is studied, and if the forwarding number is present, the call is determined to be forwarded (page 7, lines 18-33).

Regarding claims 12, 15 and 17, Alperovich teaches exchanges (fig.3; page 6, lines 3-16).

Alperovich further teaches subscribers (page 5, line 22).

Alperovich further teaches storing in the system subscriber information including service definitions of a subscriber (fig.2, element 210; page 7, lines 19-26).

Alperovich further teaches establishing connections to the subscriber via a network element having access to the subscriber information of the subscriber (fig.2, element 160; page 6, lines 24-34).

Alperovich further teaches allowing a subscriber to define in his subscriber information that his incoming calls are to be forwarded to another subscriber (page 7, lines 19-21).

Alperovich further teaches redirection counter and a calling-party directory number (page 5, lines 31-35; 'redirection counter' reads on the claim 'indicating (14) in the call establishment signaling the forwarding of a call' and 'calling-party directory number' reads on the claim 'optionally a caller identity').

Alperovich further teaches storing a group of caller identities in the subscriber information for defining a group of allowed caller identities, said allowed caller identities being either those included in or excluded from the group (fig.2; page 7, lines 19-26).

Alperovich fails to teach "determining whether the caller identity of an incoming forwarded call belongs to the allowed identities by comparing the caller identity with said group of caller identities, in response to receiving the call establishment signaling in the network element". Kocan teaches determining whether the caller identity of an incoming forwarded call belongs to the allowed identities by comparing the caller identity with said group of caller identities, in response to receiving the call establishment signaling in the network element

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(abstract; col.7, lines 9-19). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Alperovich to allow determining whether the caller identity of an incoming forwarded call belongs to the allowed identities as taught by Kocan. The motivation for the modification is to have the determination to make the call blocking based on the caller's identity.

Alperovich further fails to teach "continuing to establish the incoming forwarded call if the caller identity belongs to the allowed identities". Kocan teaches continuing to establish the incoming forwarded call if the caller identity belongs to the allowed identities (abstract; col.7, lines 9-19). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Alperovich to allow continuing to establish the incoming forwarded call for the allowed identities as taught by Kocan. The motivation for the modification is to have the determination to accept the call forwarding based on the caller's identity.

Alperovich fails to teach "rejecting the incoming forwarded call if the caller identity does not belong to the allowed identities". Kocan teaches terminating the incoming forwarded call if the caller identity does not belong to the allowed identities (abstract; col.7, lines 9-19; 'terminating' reads on the claim 'rejecting'). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Alperovich to allow rejecting the incoming forwarded call as taught by Kocan. The motivation for the modification is to have the rejection in order to minimize the fraud call forwarding.

Regarding claim 13, Alperovich teaches verifying the forwarding of a call using a redirection counter (page 7, lines 19-33; 'redirection counter' reads on the claim 'call forwarding counter').

Regarding claim 14, Alperovich teaches configuring the subscriber information stored in the storing means (fig.3; page 6, lines 3-16).

Regarding claim 16, Alperovich teaches that a redirection counter is used for verifying the forwarding of call (page 7, lines 19-33; 'redirection counter' reads on the claim 'call forwarding counter').

4. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Alperovich et al. (International Pub. No. WO 98/05153) and in view of Kocan et al. (U.S. Patent No. 5,615,253) and further in view of Lynch (U.S. Patent No. 6,487,600).

Regarding claim 6, Alperovich in view of Kocan fails to teach "accepting calls from an unknown caller number". Lynch teaches accepting calls from an unknown caller number (col.29, lines 3-12). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Alperovich in view of Kocan to allow accepting calls from an unknown caller number as taught by Lynch. The motivation for the modification is to accept the unknown caller in order to receive a link request from a user.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alam Elahee whose telephone number is (703) 305-4822. The examiner can normally be reached on Mon to Fri from 9:00am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Hofsass can be reached on (703)305-4717. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9600.

M. E.

MD SHAFIUL ALAM ELAHEE
May 16, 2003



Kimberly A. Williams
Primary Examiner
Technology Center 2600